

## **REMARKS**

The above amendment and these remarks are in response to the Office action of 13 July 2004 by Examiner Narayanswamy Subramanian.

Applicants file this amendment and reply under 37 CFR 1.111 in response to the action of the Examiner reopening prosecution to cite newly discovered art in view of the appeal filed on 5 Feb 2004.

Claims 12-19 are in the case, none having been allowed.

## ***Drawings***

The Examiner objects to the informal drawings filed in this application.

Formal drawings, which had been sent previously to the Office on or about 29 October 2001, have apparently been misplaced. For the convenience of the Examiner, a second set of formal drawings is included with this

Amendment/Response.

**35 U.S.C. 103**

Claims 12, 14, and 15 have been rejected under 35 U.S.C. 103(a) Anderson et al. (US Patent 6,05,380, sic, 6,058,380, hereinafter, Anderson) in view of Rail et al. (US Patent 5,680,611, hereinafter, Rail).

Claims 13 and 16-19 have been rejected under 35 U.S.C. 103(a) over Anderson in view of Rail and further in view of Smith et al. (US Patent 5,111,395, hereinafter, Smith).

With respect to claims 12, 14, and 15, applicants traverse the Examiner's characterizations of the teachings of Anderson and Rail.

With respect to Anderson, the Examiner refers to Column 4, which states:

"Each of the paper invoices and Electronic Invoices (collectively "Invoices") is stored in a distinct record in an invoice table in intermediary database 66.

Each record has an identifier that indicates the type of Invoice... Before an Invoice is stored in intermediary database 66, however, certain checks are performed to maintain the integrity or consistency of the data stored in intermediary database 66. For example, if a received Invoice does not include an invoice number, a unique invoice number is generated for the Invoice based on an algorithm, e.g., the account number plus designated date. All EDI Invoices are guaranteed to have an invoice number as part of the EDI transaction. Moreover, checks are made to ensure that the Invoice is associated with an existing account, that the Invoice has been received in the manner that the customer has specified for that account, that the Invoice is not a duplicate and that the vendor has sent all expected Invoices. If an exception is detected, action is taken in accordance with Table 1 and an exception report is generated in accordance with Table 2." (Anderson, Col. 4, lines 21-41.)

Based on these references, the Examiner asserts that Anderson teaches:

1. preprocessing original electronic invoices before introduction into an accounts payable data base;
2. identifying invoices having same vendor invoice designation, same purchase order number; and same item number is inherent in 810/811 invoices (see, Office Action, page 3).

As to these assertions, applicants demur without prejudice.

The Examiner states that Anderson does not teach the steps of calculating a net sum of items for a record (which applicants teach as the manner for identifying duplicate invoices), nor communicating a transaction from an intermediary to the vendor. (Office Action, page 3). For calculation of net sums to identify duplicate invoices the Examiner refers to Rail and for communicating a transaction (rejection) relies on official notice.

With respect to Rail, the Examiner states:

"Rail teaches the steps of calculating a net sum of items for a record, and identifying as a duplicate record an original record for which said

net sum is greater than zero (See Rail abstract, Column 3 lines 55-57, Column 5 lines 38-49 and claims 1 and 2).

Applicants traverse this characterization of Rail and the official notice. First, with respect to Rail, applicants assert that Rail does not teach applicants claims, which recite "calculating a net sum amount of items on invoices identified as having said same vendor invoice designation, said same purchase order number, and said same item number" in order to identify duplicate invoices. This is what Rail teaches:

"A method for detecting duplicate records generates a check-sum (222) for each record and compares the generated checksum (222) to checksums stored in check files (30). In a particular application, a system (10) for processing call detail records utilizes a duplicate check module (28) that detects duplicate records using checksum processing." (Rail, Abstract).

"Duplicate check module 28... generates a checksum for each processed CDR. The checksum is one or a

combination of values computed using the contents of at least a portion of each processed CDR. The generated checksum is then compared to stored checksums of previously processed CDRs located in check files... 30." (Rail, Col. 2, lines 51-57).

"Using the selected key fields of the record, the method generates a checksum at step 104. In general, a checksum is one or a combination of values computed using the contents of at least a portion of the record. This may be accomplished using a cyclic redundancy checksum (CRC) routine that is common in computer communications applications. For example, a transmitting device may generate a CRC on an outgoing transmission block and append the CRC to the block for transmission. The receiver detects transmission errors by comparing the appended CRC with a locally calculated CRC. If the appended CRC and locally calculated CRC do not match, an error is detected and the block is retransmitted." (Rail, Col 3, lines 54-66).

"Any system that checks historical records for duplication of a uniquely identifiable event or transaction would find value in the performance gains

and file storage savings offered by the use of checksums for duplicate record detection... (Rail, Col. 5, lines 42-46).

It is apparent that Rail does not teach applicants process for identifying duplicate invoices. A checksum as described by Rail is a cyclic redundancy check (CRC) value and is not a "zero sum" as that is used in applicants' claims. Rail is determining the checksum for all records. A CRC value is not related to a sum of invoice amounts as required by applicants claims, which state:

"calculating a net sum of items on invoices identified as having said same vendor invoice designation, said same purchase order number, and said same item number"

Rail, in order to identify duplicates, determines if two records resolve to the same CRC value, not to whether the sum of invoice amounts on selected invoices exceeds zero. Applicants traverse the assertion of the Examiner to the contrary.

Because Rail does not teach applicants calculation of invoice sum amounts, there is no basis for combining Rail

with Anderson as is done by the Examiner (see Office Action, page 4, second paragraph).

The Examiner notes that neither Anderson nor Rail teach automatically rejecting back to a vendor those invoices deemed to be duplicates. However, the Examiner takes official notice that this step is old and well known in the art and that it facilitates better and faster communication between the parties concerned. "This step" is "the step of communicating a transaction from an intermediary to the vendor". But "this step" is not what applicants claim. What applicants claim is:

"...identifying as a duplicate invoice an original electronic invoice for which said net sum is greater than zero;

"automatically communicating a duplicate invoice rejection transaction back to said vendor for said original electronic invoice identified as a duplicate invoice without posting said original electronic invoice to said accounts payable data base".

Consequently, applicants traverse.



The Examiner is using applicants' own disclosure against their claims and drawing on official notice for which no specific reference has been supplied. Because it is based in part on personal knowledge ("official notice"), applicants request under 37 C.F.R. Section 1.107(b) an affidavit of the Examiner that provides citation in support of the above assertion at page 4, lines 10-11. This will allow applicants to analyze the specific teachings upon which the Examiner relies, and enable them to prepare and submit explanatory affidavits in rebuttal.

Rail in combination with the teachings of Anderson and the assertion made by official notice do not teach to one of ordinary skill in the art the rejection of invoices to vendors based upon zero sum logic. Rail clearly teaches a method to review call records to prevent a record from appearing twice on a bill being sent to a customer. Its teachings clearly indicate that after matching the call records, if a duplicate is found, that the duplicate goes to an audit file, and is not rejected back to a vendor.

Rail does not teach to one of ordinary skill in the art the use of net sum logic for evaluating invoices. Rail deals with the creation of bills to be sent for payment, not

for invoices received for payment. Rail teaches a method that creates a "checksum" (specific characteristics of an invoice to be sent) and compares the checksum to checksums of previously created invoices to ensure a duplicate bill is not mailed. There is no teaching of how to prevent invoices to be paid from entering the database using a net zero logic which involves summing the invoice amounts of selected invoices. A 'checksum' (of which the CRC is an example) is not a net-sum-greater-than-zero calculation based on invoice amounts as is set forth in applicants' claim.

With respect to claims 13 and 16-19, the Examiner states that Anderson and Rail combined do not explicitly teach the step of sequentially sorting the records by various fields within a record in order to identify duplicate records. Applicants concur.

However, the Examiner continues:

"Smith teaches the step of sequentially sorting the records by various fields within a record in order to identify duplicate records."

Applicants traverse.

Applicants are not merely sorting by various fields, but rather claim a specific order of sorts of specific fields in order to determine the net sum. Claim 13, for example, recites:

"...first sorting said original electronic invoice against an accounts payable production table for same vendor and same vendor invoice number;

"second sorting hits from said first sorting for same purchase order billed;

"third sorting hits from said second sorting for same items billed on purchase order;

"calculating a net sum of said same items..."

This is what Smith teaches:

"Such systems are designed to eliminate a duplicate record only when all data elements of the duplicate match exactly with the data elements of

another record. Key elements of the record are combined to form a matchcode, which is then attached to the original record and carried throughout the merge/purge process... In prior art merge/purge systems a duplicate record is identified only if all elements of each matchcode match exactly.... As long as the set of criteria in one of the test sequences is satisfied, a duplicate is identified." (Smith, Col. 1, lines 39-45, 49-51, Col. 13, lines 19-21).

"1. An automated fund collection apparatus comprising:

means for creating a file, said file comprising a plurality of records, each record including a name and address of an individual,

means for selecting portions of each record,

means for making a first comparison between a first predetermined portion of a first record and a first predetermined portion of at least one second record to determine if said first portions match,

means for identifying at least one duplicate record in said file when at least said first portions match,

means for making a second comparison between a second predetermined portion of said first record and a second predetermined portion of said at least one second record to determine if said second portions match,

means for identifying at least one duplicate record in said file when at least said second portions match and said first portions do not match,

means for eliminating identified duplicate records from said file and means for creating a second file of unique records, wherein no two records identify the same individual,

means for creating a list of individuals from said second file of unique records,

means for sending each individual on said list a

proposal for an electronic funds transfer agreement in which each individual agrees to make automatic and periodic transfers of funds from each individual to a fund collection entity and, means for printing a plurality of checks and means for sending one of said plurality of checks to each said individual." (Smith, claims 1).

Applicants traverse the Examiner's characterization of Smith and the rationale for combining Smith with Anderson and Rail. Smith's matchcode is more like the CRC of Rail than applicants net sum. Smith does not teach any step of sequentially sorting records by various fields nor, more importantly, by the specific fields claimed by applicants.

With respect to claims 16, 18 and 19, pages 5-8 of the Office Action contain the Examiner's reading of Anderson, Rail and Smith, official notice, and rationale for combining them in much the same way as discussed and traversed previously with respect to claims 12-15. As before, applicants' "net sum" is not the "checksum" (CRC) of Rail or the "matchcode" of Smith, and the specific sorts on specific fields claimed by applicants for determining the "net sum" is not suggested by any of the references.

In traversing the rejections of claims 16, 18 and 19, applicants argue that the Examiner has used hindsight reasoning based on applicants own disclosure to assemble concepts from the art references and official notice which are unlike concepts described and claimed by applicants.

### **SUMMARY AND CONCLUSION**

Applicants urge that the above amendments be entered and the case passed to issue with claims 12-19.


The Application is believed to be in condition for allowance and such action by the Examiner is urged. Should differences remain, however, which do not place one/more of the remaining claims in condition for allowance, the Examiner is requested to phone the undersigned at the number provided below for the purpose of providing constructive assistance and suggestions in accordance with M.P.E.P. Sections 707.02(j) and 707.03 in order that allowable claims can be presented, thereby placing the Application in

condition for allowance without further proceedings being  
necessary.

Sincerely,

M. W. Beach, et al.

By

  
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